DOCUMENT RESUME

ED 082 631 HE 004 656

TITLE	The Role of Colleges and Universities in Continuing Education of Practicing Physicians in Communities Geographically Isolated from a Medical Teaching Center.
INSTITUTION	Gannon Coll., Erie, Pa.
SPONS AGENCY	National Institutes of Health (DHEW), Bethesda, Md. Div. of Physician Manpower.
REPORT NO	NIH-70-4209
PUB DATE	73
NOTE	78p.
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	Administrative Personnel; Educational Programs; *Higher Education; *Medical Education; *Physicians; *Professional Continuing Education; *Professional Personnel

ABSTRACT

This document contains a pilot planning program in continuing physician education conducted in the Erie, Pennsylvania metropolitan area through the cooperative activities of the Erie community of physicians and Gannon College. The research and analysis conducted in the planning program included the following components: (1) Analysis of all the available resources that a liberal arts college can contribute to an effective continuing education program for practicing physicians in a community geographically isolated from a medical teaching center. (2) Identification of other such areas where the conditions in the preceding component exist as potential recipients of the information developed in this contract. (3) Development of a demonstration program for isolated communities. (4) Development and evaluation of a short course in educational psychology and methods and techniques for hospital directors. (5) Planning an effective continuing education program. (6) Preparing a detailed estimated budget for implementation of the above programs. Following the introduction concerning the crisis in continuing physician education, the contents contain the objectives and methodologies of the program, the by-laws of the Erie Postgraduate Medical Institute, identification of cooperative relationships with professional societies and a description of course in educational planning and administration for directors of medical education. (Author/PG)

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THE ROLE OF COLLEGES AND UNIVERSITIES IN CONTINUING EDUCATION OF PRACTICING PHYSICIANS IN COMMUNITIES GEOGRAPHICALLY ISOLATED FROM A MEDICAL TEACHING CENTER

A REPORT PREPARED FOR THE

DIVISION OF PHYSICIAN MANPOWER
BUREAU OF HEALTH PROFESSIONS
EDUCATION AND MANPOWER TRAINING
NATIONAL INSTITUTES OF HEALTH

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HE 004 656

GANNON COLLEGE
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DEVELOPMENT OF THIS REPORT WAS SUPPORTED IN PART BY
CONTRACT NIH 70-4209, DIVISION OF PHYSICIAN MANPOWER,
BUREAU OF HEALTH PROFESSIONS EDUCATION AND MANPOWER
TRAINING, NATIONAL INSTITUTES OF HEALTH.

I. Introduction

The Crisis in Continuing Physician Education

A recent report on the progress of studies evaluating the performance of physicians in delivering patient care identified in rank order eighty-seven positive physician qualities and twenty-nine negative physician qualities based on ratings by 1,606 respondents in a questionnaire survey.[1] The three highest ranked positive physician qualities proposed that superior performance required that the practicing physician possess:

1. good clinical judgment (the ability to reach appropriate decisions regarding the care of patients),
2. thorough up-to-date knowledge of his own field of medicine, and
3. knowledge and ability to study patients thoroughly and to reach sound conclusions regarding diagnosis, treatment, and related problems.

The report provides additional evidence of one of the principal problems confronting our nation's health care system, the adequacy of the programs and processes of continuing physician education.

The primary professional and personal responsibility in continuing physician education rests with the individual physician. Lifetime learning has long since been proclaimed as the absolute pre-condition of continuing competence and superior physician performance.[2] In recognition of this responsibility the individual physician has formulated his own "program" of

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[1]Price, P.B., Levies, E.G., Loughmiller, G.C., Nelson, D.E., Murray, S.L., and Taylor, C.W. "Attributes of a Good Practicing Physician," Journal of Medical Education, Vol. 46, No. 3, March 1971, pages 229-237.

[2]Dryer, B.V. "Lifetime Learning for Physicians--Principles, Practices, Proposals; Summary of the Report of the Joint Study Committee in Continuing Medical Education," Journal of the American Medical Association, Vol. 180, 1962, pages 108-111.

continuing education. That program, consciously or unconsciously constructed, may consist of such activities as self-analysis, reading, listening, viewing, consultation with colleagues, and participation in organized continuing education programs. The quantity of time that the physician allocates to these activities is a function of the nature of his professional and personal activities, the freedom with which he can make decisions about allocating his time among these activities, and his personal assessment of the importance of and the benefits that can be derived from each activity. The quality of the physician's continuing education "program" depends, however, upon the quality of each of the educational experiences that he includes in his program and the effectiveness of his participation in these experiences.

Beyond the professional and personal responsibility of the individual physician there is the responsibility of institutions that are engaged in the development of educational experiences in which the individual physician may participate: medical teaching centers, professional societies, community hospitals, and other educational and health oriented programs and institutions. These institutions have assumed responsibility for the conduct of continuing physician education programs designed to disseminate the massive quantities of new medical knowledge that is being produced and to assist the physician in maintaining thorough up-to-date knowledge and good clinical judgment.

The responsibility of developing organized continuing physician education programs has been assumed in the past primarily by medical teaching centers and the state and national levels of professional societies of physicians. More recently, community hospitals are being stressed as the most appropriate centers for continuing physicians education. The appointment of Directors of Medical Education and the development of community

hospital based programs reflect this tendency. Local components of professional societies of physicians continue to provide organized educational activities for physicians. The educational programs for physicians conducted by other educational and health-oriented community programs and institutions has always been limited and peripheral, however, to the continuing education needs of physicians within a particular community. More recently, the establishment of Regional Medical Programs has added significantly to the inventory of organized continuing education activities for physicians.

What results from these efforts to set in place organized continuing education programs from which the individual physician may choose components of the continuing education program which he must design for himself is a disjointed non-system of continuing physician education activities which has "grown like Topsy" and lacks the basic characteristics of a rationally designed and well-ordered program of continuing education intended to meet the requirements of a community of physicians.

It is assumed that the physicians in each metropolitan area constitute a community who require assistance in meeting their educational needs through a program of continuing physician education that is rationally designed. Such a program should, moreover, possess the following characteristics: comprehensive, coordinated, relevant, and efficiently administered. A model program of continuing education for a community of physicians within a metropolitan area may be considered to be comprehensive if it is designed to serve the needs of medical and osteopathic doctors, general practitioners and specialists, and physicians affiliated with different hospitals. A coordinated program results from a planning process which has as its attainment of parrallelism between the educational needs of the community of practicing physicians and the educational activities that are made available

to them irrespective of the nature of the sponsorship and source of financial support for the individual educational activities that comprise the continuing physicians education program. Such a program may be acknowledged as relevant if it addresses itself to the actual needs of physicians and not to the needs presumed by those planning the specific components of the educational program. Finally, a model program of continuing education for a community of physicians will be efficiently administered if it serves the educational needs of physicians in an effective and timely fashion and minimizes unproductive expenditures of time and funds.

How can a comprehensive, coordinated, relevant and efficiently administered program of continuing physician education be established within the community of physicians in the metropolitan areas of our nation? What should displace the presently fragmented and disorganized, overlapping and incomplete array of continuing physician education activities that perplex and confuse the individual physician who is attempting to incorporate participation in selected educational activities into his own program of continuing education.

It is proposed that the physicians within a metropolitan area comprise a professional community which must assume the responsibility for the establishment of a comprehensive, coordinated, relevant, and efficiently administered program of continuing physician education. The community of physicians must organize itself specifically for the fulfillment of its obligation to its individual members: the obligation of insuring that their educational needs will be served in a systematic and effective manner. Without displacing the educational activities of the professional societies, the community hospitals, and the Regional Medical Programs, the community of

physicians must bring into existence a program of educational activites that will integrate and systematize existing educational activities, and complements them with required educational experiences which would otherwise not be available to physicians within that community. Finally, what is required in the development of a comprehensive, coordinated, relevant, and efficiently administered continuing education program for a community of physicians within our metropolitan area are resources and services in educational program planning and administration. Such educational resources and services in educational planning and administration can be provided most efficiently by a department of a medical teaching center located within the metropolitan area in which a community of physicians reside and practice. Indeed, the existing and projected medical teaching centers are located in many of the largest metropolitan areas of the nation and their communities of physicians, and they could be expected to provide the resources and services in educational program planning and administration required for the development of a continuing education program for the physician community within the same metropolitan area as that in which the medical teaching center is located.

The problem of the community of physicians that is geographically isolated from a medical teaching center is more complex. Geographic isolation, travel distance from the center of the physician community to the medical teaching center, makes it difficult to attain the constant, personal relationship which is necessary in providing the resources and services in educational program planning and administration that is required in establishing a continuing education program for a community of physicians.

Is there some other source of resources and services in educational planning and administration that may be made available to a community of

physicians that is geographically isolated from a medical teaching center? In every metropolitan area geographically isolated from a medical teaching center there are one or more educational institutions awarding baccalaureate and advanced degrees that possesses resources that have been acquired and organized and which are being utilized to meet the educational planning and administrative requirements of such institutions. These requirements are similar in many respects to those of continuing education programs for communities of practicing physicians. What role might colleges and universities which do not have medical teaching centers assume in assisting communities of physicians in establishing programs of continuing physician education? What resources and services in educational planning and administration may such colleges and universities provide?

These are the questions which were studied in a pilot Planning Program in continuing physician education conducted in the Erie, Pennsylvania metropolitan area through the cooperative activities of the Erie community of physicians and Gannon College under the provisions of a contract with the Division of Physician Manpower, Bureau of Health Professions Education and Training, National Institute of Health.

The Planning Program

The program of research and analysis conducted in the Planning Program included the following components:

1. Analysis of all the available resources that a liberal arts college can contribute to an effective continuing education program for practicing physicians in a community geographically isolated from a medical teaching center.
2. Identification of other such areas where the conditions in 1. above exist as potential recipients of the information developed in this

contract.

3. Development of a demonstration program that could be established as a model for the medical profession and liberal arts colleges in these other similarly isolated communities.
4. Development and evaluation of a short course in educational psychology and methods and techniques for Hospital Directors of Medical Education.
5. Planning an effective continuing education program for practicing physicians with evaluation mechanisms built in utilizing the resources identified in 1. above, in cooperation with the existing medical societies, the Hospital Directors of Medical Education in the area, the Regional Medical Program, and other outside available resources as deemed appropriate and helpful.
6. Preparing a detailed estimated budget for the implementation and conduct of the program as planned in 5. above.

The components included in the final report of the Planning Program are designated as follows:

1. An analysis of the identified resources that a liberal arts college can contribute toward the conduct of a continuing education program for practicing physicians.
2. An identification of the methods, techniques, and technology to be employed in the establishment of such a program.
3. An identification of the cooperative roles of medical societies, Hospital Directors of Medical Education, the Regional Medical Program, and other resources that could prove helpful.
4. A description of the methods and results of the evaluation of the program for training DME's.

5. An outline of the format for a model program having applicability in other similar communities including an estimate of funds required to operate such a program on an annual basis.

Before the procedures used in the Planning Program are described it would be appropriate to describe the community of physicians in Erie and Gannon College which comprised the principal cooperating participants in the Planning Program.

The Community of Physicians at Erie

The Erie, Pennsylvania metropolitan area is located on the southern shore of Lake Erie in northwestern Pennsylvania. At the center of the Erie Area is the City of Erie and its principal suburbs. An industrial community, the City of Erie s the center of a metropolitan area with a population of 250,000. Erie is also the economic, administrative and cultural center of a seven county area in northwestern Pennsylvania that has a total population of 630,000 persons. A number of smaller urban centers are scattered throughout the otherwise rural community of northwestern Pennsylvania. The residents of these urban and rural areas are to some degree dependent upon economic, administrative, social and cultural programs and services provided from the Erie Community.

The Erie Community is served by approximately 200 physicians who are members of the Erie County Medical Society and 75 physicians, members of the Pennsylvania Osteopathic Association, District Seven, provide the staff for two general hospitals each with approximately 500 beds, and two osteopathic hospitals each with approximately 100 beds in the City of Erie, as well as general hospitals in Union City and Corry each with approximately 75 beds. A Veteran's Hospital located in the City of Erie has a total of 150 beds. Each hospital has an active medical library which shows evidence of con-

tinued improvement but which is not entirely satisfactory to the medical profession since resources at each library are necessarily limited. Meeting rooms and facilities of education programs at each hospital are also generally adequate.

Each of the hospitals in the City of Erie conducts an educational program for its staff, interns and residents. These programs are under the direction of a director of medical education at each hospital. In the case of the Hamot Medical Center, medical education is under the direction of a Medical Education Committee and its Chairman and includes a program of Clinical graduate education and a visiting professor program in continuing education in the Basic Sciences. At St. Vincent Hospital, a Director of Medical Affairs is responsible for graduate education. In addition to the program for interns and residents, a weekly formal educational meeting is held; and sporadic additional educational activities are organized for the medical staff.

The educational programs at Doctor's Osteopathic Hospital and Erie Osteopathic Hospital are under the direction of members of the medical staff who serve as part time directors of medical education. The educational programs include weekly medical films on various subjects, discussions by particular Departments, clinical pathological conferences in various departments, and lectures by staff members to interns and the hospital staffs. In addition, educational programs are presented at the monthly staff and department meetings. Finally each hospital has presented a two day seminar each year with guest speakers.

The educational programs at general hospitals at Union City and Corry are much more modest than those that have been described for the other general hospitals because of the smaller size of these hospitals.

Continuing Physician Education in Erie

In addition to participation in programs of continuing education conducted at medical education centers as some distance from the Erie area, members of the Erie County Medical Society and the Pennsylvania Osteopathic Association (Seventh District) participate in continuing education programs sponsored by these professional societies. The Medical Society sponsors approximately 6 to 8 scientific meetings a year, each of which is usually devoted to presentations by a single professional medical educator. These meetings are usually of one day's duration. The Osteopathic Association (Seventh District) conducts a two day educational program each March, speakers being invited to present current concepts of the various aspects of medicine. A short educational program is also presented at each of the six meetings held each year. Members of the medical profession in the Erie area also participate in the Regional Medical Program.

Despite the programs of continuing education that have been described above, there is general recognition among medical and osteopathic doctors that such programs are not sufficient to meet the needs of members of medical communities. In addition to the well-known problem of developing effective programs of continuing education in the face of such obstacles to participation as the heavy work schedule of physicians, geographic isolation from a medical education center obviates the possibility of establishing a comprehensive, coordinated, integrated program of continuing education that reflects the actual needs of physicians in the Erie area, and that is conducted in a manner that will insure participation by those physicians who can benefit from such educational activities.

Gannon College

A private, liberal arts College with an enrollment of 3,500 students

located in the City of Erie, Gannon College presents undergraduate programs in the Humanities, the Natural Sciences, Engineering and Business Administration, and graduate programs in Business Administration, Education, Engineering, English, Science Education, and the Social Sciences. The College is committed to serving the educational needs of the Erie and northwestern Pennsylvania areas and is actively engaged in providing educational services beyond the structure of its traditional academic programs to the degree that its resources and such educational needs coincide. As a result, the College has achieved excellent community relations and acceptance as an educational liaison and management structure through which members of professions serving Erie and northwestern Pennsylvania can continue their educational and professional development. The administration, Faculty resources, educational and organization experience, Library, physical plant and facilities of the College are available for the conduct of appropriate programs of continuing education for members of various professions. The tradition of community service and the resources of the College thus combine to provide the capabilities for cooperation with the Erie physician community in developing a program of continuing education for physicians that could serve as a model for other communities that lack the advantages of a medical teaching center.

The Planning Process

The Planning Program was directed by a Planning Committee which was appointed with the cooperation, endorsement and support of the Erie County Medical and Osteopathic Societies, the community hospitals, and Gannon College. The Presidents of the professional societies served as ex officio members of the Planning Committee as did the Directors of Medical Education from the Community Hospitals. The Presidents of the professional societies

appointed additional members of the Planning Committee to provide for representatives from the membership of each Society, from the medical staff of each of the hospitals, and from the principal medical specialties. Emphasis was placed in selecting the members of the Planning Committee upon physicians who were known to have a special interest in continuing physician education. Throughout the Planning Program, the Committee benefited from the dedicated and imaginative leadership of its Chairman, Dr. Richard C. Lyons, a widely respected urological surgeon.

Special relationships were developed between the Planning Committee, and the Administrators of the community hospitals, the hospital librarians, and other persons who are engaged in continuing education and related programs of significance to the community of physicians.

Technical and executive services were provided by members of the Faculty of Gannon College during the Planning Program, including the Chairmen of life and behavioral science departments, the College Librarian, and the Director of the Department of Education. The Gannon College staff was directed by Dr. Joseph P. Scottino, Vice-President for Academic Affairs and Provost at the College.

The Planning Committee met approximately once each month during the Planning Program. Special meetings of the Directors of Medical Education were held in connection with the Program in Educational the product of the cooperative research and analysis conducted by the Planning Committee and the planning staff in the pilot Planning Program.

II. Characteristics and Resources of Institution of Higher Education

The principal objective of the Planning Program was "the analysis of all of the characteristics and available resources that a college or university that does not have a medical teaching center can contribute to the development and administration of an effective continuing education program for a community of physicians that is itself geographically isolated from a medical teaching center."

At an early stage in its work, the Planning Committee identified a series of characteristics and resources of institutions of higher education which may be relevant to a cooperative relationship between such an institution and a community of physicians in an effective development and administration of continuing physician education program. These characteristics and resources of colleges and universities include the following: academic community, educational planning, educational administration, educational facilities, specialized facilities, academic departments and facilities, and instructional strategies.

The Planning Committee proceeded to evaluate these characteristics and resources of colleges and universities and with the assistance of the Planning Staff it made determinations as to the nature and significance of the contribution to continuing physician education programs which could result from the application of these characteristics and resources in the planning and administration of such programs of continuing education. The results of the analysis and evaluation of each of these characteristics and resources follow.

Academic Community

Colleges and universities are first and foremost academic communities, clusters of scholars, teachers and students engaged in the discovery and transmission of truth. The facilities, equipment and resources they have

acquired and organized, are utilized in the search for and transmission of truth within multiple academic disciplines and sciences. The academic community is, therefore, characterized by a unity of purposes and a diversity of the disciplines and sciences within which those purposes are pursued.

In contrast to the college and the university, the places at which the physician functions, his office and the community hospital, are less diverse in terms of the range of academic disciplines and sciences. The functional environment of the physician is permeated by the health sciences, predominantly in their clinical aspects. While informal learning and formal educational activities are also present in the office and hospital environment of the physician and he himself may assure the responsibilities of the teacher, neither the physician's office nor the community hospital is generally regarded as academic environments. Although learning and teaching are important to the maintenance of up-to-date knowledge and clinical judgment, the emphasis in the physician's office or community hospital is on health care. The educational functions of the physician's primary working environments are subordinated to the patient care functions.

It is in these respects that the college or university can augment the physician's office and the community hospitals as learning and teaching environments.

The health sciences that are represented in the normal working environments of the physician can be complemented by academic disciplines that are represented in the academic community which have a bearing on the medical sciences and the delivery of-patient care: the biological and physical sciences, the behavioral sciences, statistical and engineering sciences, and in some respects all of the other academic disciplines and sciences that comprise the interests of colleges and universities as academic com-

munities. By joining the work environments of the physician with the academic environments of the college or university it will be possible to enlarge the structure of disciplines and sciences upon which the physician may build the information and learning system upon which he must depend in fulfilling the increasingly more complicated responsibilities of contemporary medical practice.

The college and university may afford the linkages between the health sciences and the disciplines and sciences of the comprehensive academic community that are essential to the application of medical knowledge and the exercise of clinical judgment with a fuller understanding of the truths of academic disciplines with which the physician may be unfamiliar and which he does not encounter in any systematic way in his office and in the community hospital. The college or university can contribute its competence in these non-health sciences and disciplines to the systems of continuing education which are established for the individual physician and the community of physicians.

Finally, as an academic community, the college or university is characterized by commitments to the discovery and transmission of truth, and to processes of learning, teaching, and research. The spirit of inquiry and the value attached to scholarship can contribute to the realization of the principle of lifetime learning that is essential to the reinforcement of the continuing education activities of the individual physician and the community of physicians.

When it is proposed that the college or university which is not a medical teaching center constitutes as an academic community a resource which can be used in the strengthening of continuing education programs for physicians in a community which is geographically isolated from a medical teaching center, we are not discounting the distance that exists between the academic

community and the community of physicians. And that distance is more than physical. Differences in ages, stages of personal and professional development, interests, and life styles separate the constituents of the academic and medical communities. What is proposed, however, is the establishment of a relationship between the two communities that will provide the basis for communication, the awareness of reciprocal needs and capabilities, and the initiation of access by the community of physicians to the programs, resources and capabilities of colleges and universities that may be useful in strengthening continuing physicians education programs that are available to the physician within the community in which he practices.

Educational Planning

The principal structural and procedural problem that confronts a community of physicians that attempts to meet its continuing education needs is that of planning a program of educational experience that will be characterized by comprehensiveness and relevance. Comprehensiveness relates to the necessity of providing for the continuing education of all of the physicians to be served by the program: medical and osteopathic physicians, general practitioners and specialists, and physicians on the medical staffs of individual community hospitals.

The characteristic of relevance dictates that continuing physician education programs relate to the actual needs rather than presumed needs of the members of the community of physicians.

It is difficult to avoid overlapping and duplication in the laissez-faire approach to planning for continuing physician education which characterizes programs in most communities of the nation. With responsibility for planning such programs dispersed and fragmented, the programs that result from the largely independent efforts of the professional societies, the individual community hospitals, and other health oriented programs and

institutions are not likely to constitute a single, comprehensive, coordinated program of educational experiences. Unfortunate instances of overlapping and duplication, of inconvenient and conflicting scheduling, and of major areas of education needs which are neglected, become evidence upon analysis of existing educational programs and activities. The individual Director of Medical Education is often unable to provide the educational planning needed to achieve comprehensiveness. The disparity of interests and the need to demonstrate independent accomplishment in continuing physician education programming may result in a competitive rather than a cooperative relationship among the traditional sponsors of continuing physician education programs.

An institution of higher education may provide a neutral and objective participant in a process of cooperative educational planning that could produce the characteristic of comprehensiveness in continuing physician education program development. The technical expertise in educational planning which is present among the resources and capabilities of institutions of higher education may provide the educational planning capability that is needed by traditional sponsors of continuing physician education. Utilization of the educational planning resources of an institution of higher education may provide the neutral and objective external resource which will stimulate cooperative participation by the traditional sponsors in the formulation of a single, comprehensive and coordinated program which would acknowledge that each of the traditional sponsors, and the community hospitals in particular, have the responsibility of conducting particular physician education programs which cannot be transferred to any other sponsorship. What is important in these areas of physician education programming is that knowledge of such programs and access to them be made universal throughout the medical community. Traditional sponsors should also be urged to plan and carry out such continuing physician education activities as they may be prone to plan

and carry out as a consequence of special interests, needs and capabilities of such sponsors. Full autonomy in the sponsorship and the financing of such activities is not inconcistent with comprehensive and coordinated planning. What is necessary is that the traditional sponsors submit to the discipline of consultation and the general accepted objective of contributing to the development of an integrated program of continuing education for the community of physicians served by the traditional sponsors.

Finally, educational planning carried on by the traditional sponsors with cooperation from an institution of higher education might result in the identification of program needs which the traditional sponsors are unable to carry out with securing the cooperation of an educational institution. In some cases, the educational need may relate to a science or discipline that is within the competency of the institution of higher education. These circumstances raise the possibility of a final component of a comprehensive program of physician continuing education which might be sponsored by the institution of higher education. In general, this latter alternative should be avoided. Obviously one of the possible consequences of the cooperative participation of an institution of higher education in planning physician continuing education may prove to be negative. As a potential sponsor of educational activities, the college or university might increase the number of competing sponsors, especially if institutional interests were to become so pronounced that the central role of cooperating in the planning of educational activities which are to be carried out by the traditional sponsors were even only occasionally and incidentally placed in a secondary status.

Relating continuing physician education programs to actual rather than presumed needs is a crucial factor in program planning. The "one man" planning process, opportunistic programming based on the feasibility of

undertaking a particular educational activity are among the deterrents to revelance in education planning. The methodological problems associated with planning for relevancy are extremely complex. Despite innovative techniques that have been formulated and tested in recent years, determining the actual educational needs of individual physicians and a community of physicians remains a complicated task. It is probable that the application of the educational planning resources and experiences of institutions of higher education will result in a closer approximation between the actual needs of physicians and the needs to which continuing education programs address themselves. This will be especially probable in a period such as the present when institutions of higher education are unusually sensitive to the characteristic of relevance in educational programming. Finally, institutions of higher education may assist a community of physicians in utilizing the innovative teachniques that are being developed for identifying physician continuing education needs and contributing to the utilization of knowledge derived from the application of such needs in planning continuing education experiences for a community of physicians.

Educational Administration

Beyond the process of planning a comprehensive and relevant continuing education program for a community of physicians there is the entire range of activities that may be identified as program administration. The effectiveness of an educational program may rest as much upon the detailed procedures through which an educational experience is carried out as it will hinge upon the coordination of educational needs and the educational experiences that have been planned. Scheduling is, for example, a matter of substantial consequence. Avoiding conflicts and minimizing inconveniences for the target physician community, and the coordination of teaching resources, and the community of learners pose problems of scheduling that may exceed the

limited administrative resources of traditional sponsors acting individually. Indeed, some of the traditional sponsors, such as the professional societies may rely upon extremely limited and inadequate program administration capabilities.

Notification in a timely, accurate and encouraging fashion is one of the principal deficiencies of program administration for continuing physician education. The feasibility of a single, integrated calendar of educational events suggests itself immediately as an advantageous development in effective program administration.

Carrying out the incidental, but cummulatively crucial steps associated with the individual educational experiences are activities which might be undertaken with greater assurance through a central program administration mechanism for those traditional sponsors which lack independent capability for carrying out these aspects of continuing physician education programming.

Educational Facilities

Continuing education programs for physicians often require facilities and resources that are available only at a community hospital. Thus, rounds and other procedures for observing patients who are experiencing problems that are under consideration require that such educational activities be conducted within a hospital environment. The importance of scheduling continuing education activities at times and places that are convenient to physicians also suggests the desirability of conducting such activities at the place where physicians do a great deal of their work and where large numbers of physicians will regularly be coming together, the community hospital.

There are, however, opportunities for the use of facilities outside the hospital in which the facilities of a cooperating college or university may prove useful. If the specific facilities and resources are not required, if they are not adequate, if it is thought to be desirable to hold an educational

program on a site that will be distinct from that of the hospitals as the every-day work place of the physicians, if physicians from two or more community hospitals find it more agreeable to meet away from any one of the hospitals, if medical and osteopathic physicians would feel more comfortable at a site other than one of the hospitals at which they serve, and if the educational program would be enhanced by a more comfortable environment at which food and refreshments could be served in a more relaxed and pleasant manner, the utilization of the facilities of a college or university may be preferable to conducting particular continuing education activities at a community hospital.

While facilities for educational activities at community hospitals are becoming more sophisticated, there are many circumstances in which the facilities available at a college or university are larger, more elaborate and more practical for particular educational experiences. This is especially true with regard to the audio-visual equipment and other resources that are increasingly required for more effective presentations of medical information. A modern lecture hall is no longer sufficient. Parking facilities may be a significant factor. Good lighting, air-conditioning, attractive decor and generally pleasant atmosphere are important also. So too is the availability of screens and projectors of varying capabilities, operated efficiently, with good maintenance and service, and well organized scheduled utilization. Increasingly also, colleges and university campus facilities are being equipped with more advanced technologies which are seldom present in a community hospital. Closed circuit television, audio and video reproduction, storage and play back capabilities, information retrieval and dial access systems, and computer assisted instruction are more frequently available at a college or university than at a community hospital. These facilities and resources should be considered in solving decisions about the location of continuing physician education activities, and it would appear that such activities could with considerable frequency be better

accommodated at a cooperating college or university than at a community hospital or other traditional sites at which such programs are held.

In general, the facilities and resources available at a college or university increase the range of alternatives from which a decision as to where continuing physician education activities can most effectively be conducted. The most suitable location may vary with particular educational activities and a careful balancing of advantages and costs must be made in each instance, but it seems clear that such programs could with significant frequency make good use of the facilities and resources of a cooperating college or university.

Costs and availability must also be considered. What is available at a community hospital is normally available without charges. Colleges and universities may be compelled to charge for the use of their facilities and resources. Nor have institutions of higher education always been hospitable to the use of their facilities by "outside" groups. Sponsors of continuing physician education programs will, however, in general find such institutions to be more receptive to requests for facility utilization in accordance with the growing tendency of such institutions toward community involvement.

Specialized Facilities

In addition to the general facilities and resources of colleges and universities which may be used for continuing education presentations to physicians in a group setting, there are specialized facilities which a cooperating institution of higher education may make available for the enhancement of continuing physician education programs.

While a college or university not affiliated with a medical school may not have medical library resources comparable to those available at a good hospital library, the latter are not always very good or even present at all. In any event, the general and special collections of a cooperating college or university library may prove useful. This may be especially true of collections

of books and periodicals in the basic sciences, the behavioral sciences, mathematics and engineering. Physicians have increasing need to consult such collections. Physicians also may benefit from more developed inter-library loan and other types of library services that may be more available at a college and university than at community hospitals. In this connection, the possibility of cooperative relationships among community hospital libraries and between such libraries and a college or university library may provide the foundation for a comprehensive medical library system and services within a region, increasing the resources and services that would be available to a physician at any particular community hospital within that region.

Laboratory and computer facilities at a cooperating college or university may be more abundant than those at a community hospital and may be of importance in special demonstration type education programs or in research activities in which physicians may be engaged. Auxiliary services available at such laboratories and computer centers may increase the capabilities of physicians in using such facilities for specialized educational presentations or for research.

Academic Departments and Faculties

Depending upon the amount of advanced degree work which is being carried on at a college or university that does not have a medical teaching center, the academic departments and faculties of a cooperating institution of higher education may possess instructional resources that can be utilized in continuing physician education programming. While such resources will not be present in the degree that one might at first suppose, there may be opportunities for utilizing the instructional capabilities of the faculties of such institutions in connection with specific continuing education activities. Biology, chemistry, physics, mathematics, engineering, behavioral science departments and faculties may in some circumstances have direct relevance to continuing physician edu-

cation programs. Genetics and statistics are good examples of specializations that may be present in sufficient quality and depth among the faculty of a cooperating college or university to warrant participation in meeting the educational needs of practicing physicians whose knowledge of these sciences may be only very basic and can become obsolete quickly.

The faculty of a cooperating college or university may similarly be helpful to physicians who wish to engage in research and who may require the assistance of specialists in research design and in the utilization of applied mathematic and computer technologies in such research activities.

While sponsors of continuing physician education programs and individual physicians will find members of college and university faculties receptive to participation in continuing education and research activities as have been described, it is clear that there are a wide range of considerations which may limit their ability to respond. Their own professional interests, the need to allocate their time and energy in accordance with a system of priorities, the factor of costs and compensation, and a degree of distance between practicing physicians and academic faculties, may serve to limit the utilization of such faculty resources in continuing physician education and research programs. A careful assessment of capabilities, interests, and mututal benefits, and appropriate strategies for facilitating the cooperative participation of academic faculties may yield very productive relationships.

Instructional Strategies

The planning and administration of continuing physician education programs requires the careful development of instructional strategies. Programs as a whole and particular sessions of a larger program should evidence consideration of the persons to be served, the educational needs of those persons, the alternative approaches to meeting those needs, selecting from among those alternatives those which will produce the greatest effect, and developing a reinforcing

environment in which these education methods will be utilized.

Colleges and universities have experience in developing instructional strategies. They can assist a community of physicians in developing instructional strategies for continuing physician education programs which can be more effective than programs formulated without consultation and cooperation from an educational institution.

In this respect, a cooperating college or university can be of assistance to members of the physician community who are themselves engaged in teaching. A significant number of physicians in a community hospital are engaged in teaching educational programs for their colleagues, for interns and residents, for allied health personnel, for patients, and for the general public. Such physician-teachers may be very well prepared as physicians, but they may lack training and experience as teachers, and the quality of their teaching may reflect this lack of training and experience. A cooperating college or university could provide consultation and informal training for physicians who are interested in evaluating their teaching, reflecting on the act of teaching, and developing a knowledge of educational psychology and methodologies that will enable them to improve the quality of their own teaching. Occasional seminars and workshops could be conducted, moreover, for groups of physicians with the objective of improving their teaching skills as individuals and contributing to the improvement of educational programs for which they are collectively responsible.

III. Methodologies

The second objective of the Planning Program was the identification of the methods, techniques and technology which might be employed in the establishment of a cooperative relationship between a community of physicians and an institution of higher education for the purpose of planning and administering an effective physician continuing education program in a community which is geographically isolated from a medical teaching center. The methodologies with which the Planning Programs have been concerned are both structural and programmatic.

Structural Methodologies

What structural relationships need to be established to attain cooperation among physicians, professional societies, Directors of Medical Education, community hospitals, other institutions and programs, and a college or university in a cooperative program for the improvement of physician continuing education programs? Two structural models have been considered in the Planning Program: a relatively less formal planning or coordinating committee, and a more highly organized structure such as a postgraduate medical institute.

A planning or coordinating committee may be sufficient for many of the purposes of the cooperative program. The planning or coordinating committee could be authorized by the professional societies, the community hospital and the cooperating institution of higher education. Such authorization could be granted in general terms leaving undefined both the rights and obligations of those authorizing the committee, and the powers and responsibilities of the committee itself. In time, however, common understandings of the relationship of the authorizing bodies and the committee may result in the specification of that relationship

and actual experiences may help to identify the form of the relationship that will be mutually acceptable. Thus, it will in time become evident that the committee can assist the authorizing bodies in improving the planning and administration of physicians continuing education programs, the efforts of the committee that are productive will gain acceptance, and the committee will be acknowledged as enjoying the power to carry out activities that will produce positive results. Similarly, other activities of the committee may be unproductive, the authorizing bodies would take note of that fact, and it will become clear that the committee should not be expected to engage in such activities. In any case, either at its inception or with the passage of time, a common understanding of the role and functions of the committee will emerge and it may be formalized in written agreements among the authorizing bodies.

Participation and representation of the planning or coordinating committee will be a crucial characteristic of the structural relationship that is developed. It will be necessary to identify the community of physicians to be served by the cooperative program. This community would include one or more counties in which physicians can conveniently join together to plan, carry out and participate in educational programs and activities on a regular basis. Having defined geographical parameters, the community of physicians to be served, it will be necessary to secure representation of the physicians. This would normally be accomplished by appointments made by the professional societies. The feasibility of securing representation for both medical physicians and osteopathic physicians will depend on local circumstances. If both groups are represented it will be advisable to secure a quasi proportional respresentation of each group. The actual committee representatives should be appointed by the governing body of the local professional society and appointments should

be made from well known leaders of the physician community who are acknowledged for their interest in the improvement of physician continuing education.

The Directors of Medical Education at community hospitals within the community to be served by the cooperative program should hold membership on the committee. Their number will not ordinarily be large and each could be accorded direct membership. Where their number would appear to be too great for direct membership, some mode of representation might be considered. In any case, it would be necessary to involve every such Director of Medical Education in the functioning of the committee, through their participation in subcommittees that might be formed to plan or carry out specific activities of the program. The Directors of Medical Education should be acknowledged as the principal medical educators of their hospitals and the cooperative program should confirm and strengthen that role. The cooperative participation of the Directors is crucial to the success of the work of the planning or coordinating committee. Mere membership or representation, and participation in the committee is not sufficient. The Directors must acknowledge the capacity of the committee to assist them in fulfilling their own responsibilities. They must, therefore, contribute to the development of the capabilities of the committee. Such a mutually productive relationship can be developed provided that the Directors of Medical Education are convinced of the value of the contribution to the improvement of physician continuing education which can be accomplished with the assistance of the cooperative program. The Directors should also be convinced that the cooperative program will not interfere with or adversely affect them in the performance of their professional responsibilities as medical education administrators. In these respects, programs such as the seminar described in the next

chapter of this report which are designed to strengthen the capabilities of the Directors of Medical Education can be very useful.

The planning or coordinating committee should also include representation from the administrations of the community hospitals at which physicians to be served in the cooperative program hold staff membership and privileges. Since educational programs are an increasing part of the program of services provided by hospitals, the relationship of continuing physician education to the quality of patient care, the growing recognition of the community hospital as the seat of such educational programs, and the financial responsibilities of the hospitals for such programs require that the community hospitals each participate directly, or through some system of representation, in the planning or coordinating committee. One of the primary purposes is informational. The committee and the hospital administrations should be aware of the work of the committee and the educational activities of the hospitals. In addition, many of the activities of the committee are intended to affect the conduct of educational programs conducted at the hospitals. The hospital administrators would rightfully resist such activities if they did not participate in formulating and agreeing to them. In this connection, the participation and representation of the Directors of Medical Education may not be sufficient. It may be necessary to have representation of the hospital administrations as distinct from that provided by the participation or representation of the Directors of Medical Education.

Representation on the planning or coordinating committee of other health associations and programs will ordinarily not be necessary. In circumstances in which a health association or program is very heavily engaged in continuing education programs for physicians either as a sponsor or in providing financial support for such programs, participation

in the planning committee may be warranted. What is important is that informational linkages be established with such programs. What has been said about health associations and programs is especially true of comprehensive health planning agencies and educational programs for allied health professions. It is important that the cooperative program have communication linkages with such programs and that its activities be coordinated with such programs wherever there are common concerns and related activities. The form which such liaison should take depends upon actual circumstances in each case. The relationship would not ordinarily, however, require direct representation of such programs on the planning or coordinating committee.

Finally, the cooperating institution of higher education should be represented in the membership of the planning or coordinating committee. Such representation can be limited to one person, preferably a principal administrative officer of the college or university. While the interests of the cooperating institution of higher education require such representation, it must be clear that in every respect the participation of the cooperating institution is intended to contribute to the advancement of the community of physicians. That participation should not be directed toward the realization of institutional objectives except as such participation leads to the improvement of continuing physician education.

The representative of the college or university should have sufficient support within that institution so that he can secure the cooperative participation of its faculty and administration in securing the resources that may reasonably be allocated to the programs undertaken by the planning and coordinating committee. Faculty, facilities, and services must be available under reasonable conditions for the common enterprises to which the institution is committee as a constituent member of the planning

and coordinating committee.

The development of cooperative relationships between institutions of higher education may enable the cooperating college or community to secure assistance and resources from other institutions of higher education. The presence of other colleges and institutions in the area served by the planning and coordinating committee may suggest the desirability or necessity of granting membership in the committee to representatives from such other colleges and universities. It will be necessary, however, for the committee to avoid becoming embroiled in the often complex relationships of colleges and universities within a particular region.

The relatively less complex and informal structure of the planning committee may be contrasted with the structural relationships that are inherent in the structure of an institute for continuing physician education wuch as that which has emerged from the experience of the Planning Program. Modeled after the Postgraduate Medical Institute at Boston, the Erie Postgraduate Medical Institute is an association of many of the institutions and parties that have been described as constituent members of the planning or coordinating committee. A copy of the By Laws of the Institute are attached as an appendix to this Chapter.

The Institute differs from the planning or coordinating committee in the following respects:

1. It is a formal association established by agreements of participation by the constituent members.
2. Its membership includes all of the physicians who practice in the community served by the Institute.
3. The Institute is governed by a Board of Directors composed of ex officio representatives of the participating professional societies, the community

hospitals, and the cooperating institution of higher education; and representatives elected by the professional societies.

4. The Board of Directors elect the Officers of the Institute who serve as the Executive Committee.
5. The objectives of the Institute are specified.
6. The Institute is empowered to accomplish those objectives and is guided by procedures that are common to formal associations.

In the model developed in the Planning Program, the participating institution of higher education provides administrative services to the Institute and serves as its fiscal agent. Other models are founded upon a non-profit corporate structure with independent financial and administrative capabilities.

The Institute may also organize committees to accomplish specific tasks, although such developments are also probable in the form of sub-committees in the planning or coordinating committee model.

Whether in a particular instance the planning or coordinating committee model or the Institute model is adopted might depend upon local circumstances. It is probable, however, that the Institute will emerge from a planning committee if the latter gathers acceptance through accomplishment and the constituent members perceive even greater results as probable from the establishment of an Institute.

Programmatic Methodologies

In addition to the establishment of structural relationships, the Planning Program examined various programmatic methodologies that may be employed in making the resources of a college or university available for the improvement of continuing physician education in a community that is

geographically isolated from a medical teaching center. The programmatic methodologies include: determination of needs, communications, coordination, program administration, teaching strategies, facilities and equipment and evaluation. Each of these programmatic methodologies is described in the material that follows.

Determination of Needs

One of the first requirements in the improvement of continuing physician education programs is the development of more effective procedures for determining educational needs. A cooperative relationship between an institution of higher education and the members of a medical community can result in the implementation of sophisticated techniques for assessing the performance of physicians as individuals and as house staffs in community hospitals and utilizing the information secured from such assessments in determining areas of medical knowledge and physician skill that ought to be improved. The use of self administered tests by physicians, the development of profiles of the practice of individual physicians and hospital staffs, the evaluation of the reports of hospital audit and review committees can provide important guidance in planning the content of continuing physician education programs. Members of the staff of a college or university can provide assistance to the members of a physician community in utilizing such procedures for determining the educational needs of physicians and in planning continuing education programs in accordance with the needs that have been defined.

Communications

Two kinds of communications are essential if continuing physician education programs are to be strengthened. The first kind of communication is among members of the medical profession, the professional societies,

the Directors of Medical Education, the community hospitals, and education program planners within a medical community. A cooperating institution of higher education can provide a neutral instrument through which components of a medical community that otherwise find it difficult to communicate with one another can do so with the assistance of the college or university.

The cooperating institution of higher education can also develop a process of communicating to every physician within a medical community continuing education programs and activities that are presented by a particular professional society or hospital, activities that might ordinarily be communicated only to members of that society or hospital staff. The process of gathering information about all such educational activities, publishing concise schedules of information regarding such activities, and disseminating a published schedule of all educational programs will serve to improve knowledge of and participation in continuing education programs presented within the medical community.

Coordination

The cooperating institution of higher education can assist in the communication of information about proposed continuing physician education programs that are under consideration by particular sponsors within a medical community. The dissemination of such information will tend to reduce overlapping and duplication and to improve the coordination of continuing physician education programming. The college or university can indeed provide leadership in the development of a system of consultation among continuing physician education program sponsors and develop a foundation for coordination in program planning. The cooperating institution can not only contribute to the recognition of the need for coordination but it can also provide assistance in maintaining the mechanism of communi-

cation, cooperative planning, and coordination in continuing physician education program development.

Program Administration

The establishment of a cooperative relationship between an institution of higher education and a medical community that is geographically isolated from a medical teaching center can also result in the strengthening of the capacity to plan specific programs, to carry out such programs, and to provide for the financing of such activities. The determination of educational needs and the establishment of processes for coordinating activities designed to fill such needs must be followed by a wide range of specific steps that include the development of a curriculum, the determination of teaching and learning strategies, the recruitment of instructional staff, the preparation and publication of carefully designed schedules, securing the necessary facilities and equipment, organizing educational program sessions, and securing financial support for expenditures that will be incurred. All of these kinds of activities are commonplace to an institution of higher education, and it can provide assistance in carrying out these functions to the components of a medical community that are attempting to strengthen continuing medical education programs.

Teaching Strategies

Differing kinds of knowledge and skills, learning problems, and learning environments may require particular teaching strategies that are specifically selected so as to maximize learning in varying contexts. The range of teaching strategies extends from the traditional lecture through computer assisted instruction. The effectiveness of learning in a particular context may depend upon the appropriateness of the teaching

strategy that is selected. A college or university will have instructional planning personnel who have knowledge and experience regarding the selection of teaching strategies that could provide important assistance in planning continuing medical education programs and in strengthening the performance and effectiveness of such programs in attaining the objectives for which they have been developed. Diagnosing an education need and prescribing appropriate instructional strategies in meeting such needs requires competence in educational planning and administration that is not abundantly available within a medical community that is isolated from a medical teaching center. A cooperating institution of higher education can help to meet the need for such planning.

Facilities and Equipment

Colleges and universities possess lecture halls, seminar rooms, and audio visual and instructional equipment that ordinarily surpasses the resources of community hospitals or other sites at which continuing physician education programs are presented. While the community hospital may be convenient for members of the staff of that hospital, and the availability of patients and clinical material for demonstrations and rounds suggest that continuing medical education programs ought to be presented within a community hospital, there are circumstances in which the facilities of a college or university might be convenient for physicians from two or more hospitals within a community and for programs in which patients, clinical materials, and demonstrations and rounds are not important for physicians elements of an educational experience. It may be important for physicians to participate occasionally in continuing education programs at sites other than community hospitals, and college facilities may in such instances provide an environment that will

strengthen attitudes toward learning and self development, attitudes that are important in improving physician participation in continuing medical education activities.

Evaluation

The improvement of the effectiveness of continuing medical education programs requires careful evaluation of such programs and the modification of such programs to reflect feedback secured through such evaluations. The techniques of evaluation are complex and there is a definite hesitance to engage in evaluation processes. As a consequence, continuing medical education programs tend to rely upon unsystematic and inadequate processes for assessing their performance and securing recommendations for program modification. College and university facilities include professional educational planners and administrators who are often skilled in the techniques of evaluating education programs. A cooperating college or university might, therefore, provide evaluative services or provide guidance in the development of evaluation components for continuing physician education programs that are planned and administered by a medical community without benefit of evaluation services that are available at a medical teaching center.

BY-LAWS OF THE

ERIE POSTGRADUATE MEDICAL INSTITUTE

ARTICLE I

PRINCIPAL OFFICE AND SEAL

Section 1. The principal business office of the Institute shall be in the City of Erie, County of Erie, Commonwealth of Pennsylvania.

Section 2. The seal shall be circular in form, with the words "Erie Postgraduate Medical Institute" around the periphery and the words and figures "1971-Pennsylvania" within.

ARTICLE II

PURPOSES OF THE INSTITUTE

Section 1. The general purposes of the Institute shall be as follows:

1. The improvement of the quality of patient care rendered by physicians.

2. The maintenance of thorough up-to-date knowledge of the physician's field of medicine.

3. The improvement of the physicians's knowledge and ability to study patients thoroughly and to reach sound conclusions regarding diagnosis, treatment and related problems.

4. The fulfillment of the responsibility of the community of physicians to plan and administer an effective program of continuing physicians education through the cooperative participation or representatives of the professional societies of physicians, the community hospitals, health-oriented programs and associations, and cooperating institutions of higher education.

Section 2. The Institute shall carry out specific purposes, and conduct programs and activities which are necessary and proper to the fulfillment of the general purposes of the Institute.

ARTICLE III

MEMBERSHIP OF THE INSTITUTE

Section 1. The members of the Insitutute shall consist of Fellows and Associate Members.

Section 2. The Fellows shall consist of those physicians who shall from time to time be the members of the Erie County Medical Society and the Erie Pennsylvania Osteopathic Association, District Seven.

Section 3. The Associate Members shall consist of those members of the Board of Directos who are not Fellows, and other persons who have been selected for Associate Member status because of their interest and contribution to the purposes of the Institute who are not Fellows and who have been elected as Associate Members by the Board of Directors.

Section 4. Each member of the Institute shall be entitled to one vote.

Section 5. The annual meeting of the members of the Institute for the election by ballot of Directors and the transaction of such other business as shall properly come before the meeting shall be held at the office of the Institute in the City of Erie, or at such other place as may be stated. In case the annual meeting shall not be duly called and held, the Board of Directors shall call a special meeting in lieu of and for the purpose of such annual meeting and all proceedings at such special meeting shall have the same force and effect as at an annual meeting.

Section 6. Special meetings of the members shall be called by the Secretary whenever the Board of Directors or the President shall so order, or upon written request of three or more members, and such request shall state the purpose of such meeting.

Section 7. Notice of the annual meeting and of all special meetings of the members shall be given by the Secretary by mailing or delivering to each member at least seven days before the day fixed for the meeting a notice stating the place, day, hour, and purpose of the meeting.

Section 8. Twenty-five members shall constitute a quorum, but a smaller number may adjourn from time to time.

Section 9. Members may waive notice of a meeting by a writing signed before or after such meeting and if present at any meeting shall be conclusively presumed to have received due notice therof.

ARTICLE IV

BOARD OF DIRECTORS

Section 1. The affairs, property and business of the Institute shall be managed by a Board of not less than thirteen or more than thirty-six Directors as may be determined by vote of the members of the Institute from time to time. The Board of Directors may exercise all such powers of the Institute as are not by law or by these by-laws required to be otherwise exercised.

Section 2. The Board of Director shall include designated and appointed members.

Section 3. The designated members of the Board of Directors shall include those persons designated by the following officers of public and private agencies who shall each be asked to designate one person to serve as Director:

(1) The President of the Erie County Medical Society.

(2) The President of the Erie Pennsylvania Osteopathic Association, District Seven.

(3) The Directors of Medical Education at Doctor's Osteopathic Hospital, Erie Osteopathic Hospital, Hamot Hospital, St. Vincent Hospital, and the Veterans Administration Hospital at Erie.

(4) The Administrators of Doctor's Osteopathic Hospital, Erie Osteopathic Hospital, Hamot Hospital, St. Vincent Hospital, and the Veterans Administration Hospital at Erie.

(5) The President of Gannon College.

If any of the foregoing offices are vacant, the designation may be made by the person then serving temporarily in such office. If any of the foregoing officers fail to make such designation, the members may elect such person as they see fit to fill that position on the Board of Directors.

Section 4. The appointed members of the Board of Directors shall include nine physicians appointed by the President of the Erie County Medical Society and the Erie Pennsylvania Osteopathic Association, District Seven.

Section 5. Directors need not be members of the Insitutute at the time of their designation or appointment, and shall hold office until the next annual meeting of the members of the Institute and thereafter until their successors are elected and qualify.

Section 6. Any Director may be removed from office for cause by a majority of the members of the Institute either by a writing filed with the Secretary of the Insitutute or by a vote passed at a meeting of the members.

Section 7. In case of any vacancy on the Board of Directors, a new Director may be elected by the members of the Insitutue for the unexpired portion of the term, and if the vacancy arises in any of the positions on the Board of Directors referred to in Section 3. thereof, the vacancy shall be filled by vote of the members in accordance with the provisions of said Section 3. Until the election of a successor by the members of the Institute a vacancy may be filled by vote of the majority of the remaining Directors.

Section 8. A majority of the Directors in office for the time being or thirteen directors, whichever is less, shall constitute a quorum for the transaction of business but a smaller number may adjourn from time to time.

Section 9. Regular meetings of the Board of Directors shall be held at such times and places as the Board of Directors may determine. Special meetings shall be called by the Secretary whenever the President or any three Directors shall so request in writing, and three days' notice of such meetings shall be given to each Director not joining in the request. Directors may waive notice of a meeting by a writing signed before or after such meeting and if present at a meeting shall be conclusively presumed to have received due notice thereof.

Section 10. Directors as such shall not receive any stated salary for their services. Nothing herin contained shall be construed to preclude a Director from serving the Institute in any other capacity and receiving renumeration for such service.

Section 11. The Board of Directors may from time to time delegate any of its powers to committees or officers, attorneys, or agents of the corporation subject to such regulations as may be adopted by the Board.

ARTICLE V

COMMITTEES

Section 1. There shall be an Executive Committee consisting of not more than nine members of the Board of Directors including the President, who shall be Chairman, the Vice-President, and the Treasurer, or such of those officers as are members of the Board of Directors. The members of the Executive Committee shall be elected by the Directors at their annual meeting each year. Except as otherwise provided by law, during the interval between meetings of the Board of Directors, the Executive Committee shall have and may exercise the powers of the Board of Directors. A majority of the members of the Executive Committee shall constitute a quorum for the transaction of business.

Section 2. The Board of Directors shall each year appoint a Nominating Committee composed in such manner as the Directors shall determine. The Nominating Committee shall also obtain from the officers referred to in subparagraphs (1) through (95) of Article IV, Section 3, the names of the persons designated by them to serve as directors. The Nominating Committee shall nominate each of the foregoing named persons and transmit these nominations together with such other nominations for positions on the Board of Directors as the Committee wishes to make to the members of the corporation for consideration by the members at their annual meeting along with such other nominations as may be made by any members. The Nominating Committee may request other officers and agencies in Erie County interested in post-graduate medical education to submit recommendations for nominations of Directors.

Section 3. In addition to the Executive Committee there may be appointed such committees as the Directors deem advisable.

ARTICLE VI

OFFICERS

Section 1. The officers of the Institute shall be a President, a Treasurer, a Secretary, and such subordinate officers as the Board of Directors shall from time to time elect with such powers and duties and for such terms of office as the directors may designate. The Directors at the first meeting in each year following the annual meeting of the members of the Institute (hereinafter referred to as the annual meeting of the Directors) shall elect the aforesaid officers, provided, however, that the founders of the Institute at their first meeting shall elect a Treasurer and Secretary. All of the said officers shall hold their respective offices for one year and thereafter until their successors are elected and qualified, unless a different term shall be designated by the Directors, subject, however, to removal at any time by a vote of a majority of the Board of Directors, except that the officers appointed at the first meeting of the Board of Directors and at the first meeting of founders of the Institute shall hold office only until the first annual meeting of Directors and thereafter until their successors are elected and qualified. Vacancies in any of the said offices shall be filled for the unexpired portion of the term by the Board of Directors.

Section 2. The President shall be the chief executive officer of the Institute. He shall preside at all meetings of the Board of Directors. He shall see that all orders and resolutions of the Board of Directors are complied with. The Board of Directors may elect a Vice-President, who shall, in case of death, disability or absence of the President, exercise the powers of the latter.

Section 3. The Treasurer shall have charge of the Institute's financial affairs subject, however, to the supervision and control of the Board of Directors. He shall have the custody of all money and securities, except his own bond, which shall be kept by the President. He shall deposit all money and valuables in the name and to the credit of the Institute in such depositaries as shall be determined by the Board of Directors. He shall disburse the funds of the Institute as ordered by the Board of Directors. He shall keep or cause to be kept the Institute's accounts in suitable books wherein every transaction shall be accurately recorded and shall render to the President and Directors at regular meetings of the Board or whenever they require it, and account of his transactions as Treasurer and of the financial condition of the Institute and shall discharge all other duties properly appertaining to his office or which may be attached thereto by the Board of Directors. He shall give bond for the faithful discharge of his duties in such form and in such sum as the Board of Directors may require.

The Board of Directors may elect an Assistant Treasurer who may be given such of the powers and duties of the Treasurer as the Board may determine to be exercised under such conditions as the Board may determine, and an Assistant Treasurer shall give bond for the effective discharge of his duties in such form and in such sum as the Board of Directors may require.

Section 4. The Secretary shall keep the records of all meetings of the Institution and shall give notice of all meetings required by these by-laws. He shall have the custody of the record books of the Institute and shall perform all duties usually incident to the office of Secretary and such other duties as may be from time to time assigned to him by the Board of Directors.

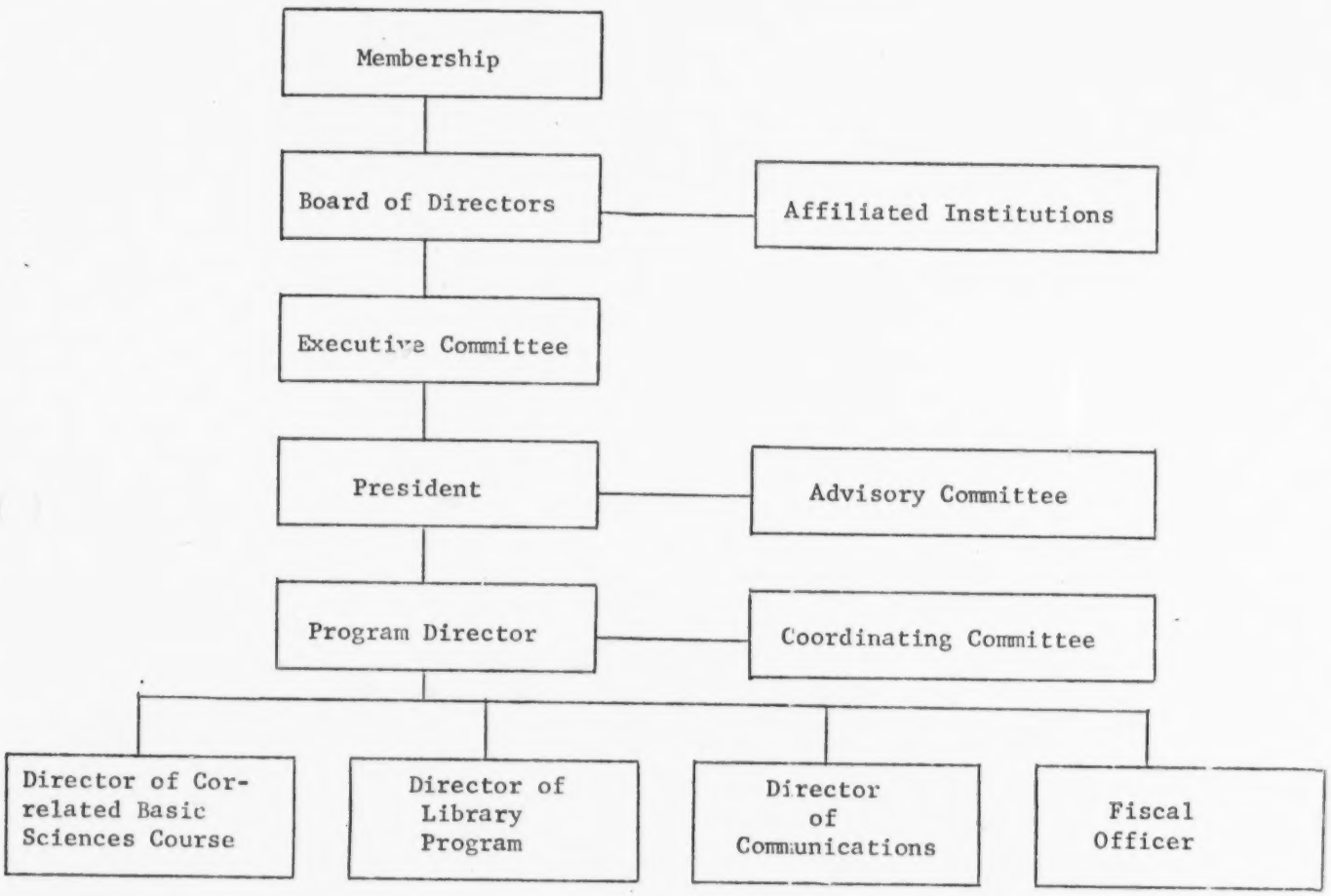
ARTICLE VII

AMENDMENT OF BY-LAWS

Section 1. These by-laws may be amended or repealed by majority vote of the members of the Institute present at any regular meeting or at a special meeting called for the purpose, of which due notice has been given to each member with a copy of the proposed amendments.

ERIE POSTGRADUATE MEDICAL INSTITUTE

ORGANIZATION CHART



IV. Cooperative Relationships

The third objective of the Planning Program was the "Identification of the cooperative roles of professional societies of physicians, community hospitals, Directors of Medical Education, the Regional Medical Program, and other programs, associations, and institutions which could contribute to the planning and development of an effective continuing physician education program in a community that is geographically isolated from a medical teaching center through the cooperation of the physician community and are institutions of higher education."

Professional Societies

Continued professional development is one of the principal objectives of the professional societies in which physicians hold membership. Whether they have general or special memberships; or whether they are national, regional or local in their dimension, all such professional societies are organized in great measure to maintain and promote the professional competence of physicians. These purposes are accomplished in part through the development of programs of continuing physicians' education that vary greatly in their particular characteristics.

National associations for general and special practice not only provide educational opportunities, but encourage such participation through such programs as the American Medical Association Physicians Recognition Award. Leaders of the medical profession are also counseling physicians who take continuing education more seriously in the light of the possibility of relicensure proceedings. At the state level and in some of the specialty societies, indeed, very specific, quantitative requirements of participation in continuing education programs are being established for physicians who are seeking to retain their licenses or to retain membership in a professional society.

The professional societies above the local level thus encourage, and in some cases require, physician participation in continuing medical education programs,

and they provide educational programs in which physicians may participate in order to maintain their professional competence. An individual physician may meet at least part of his responsibilities of continuing his professional development by participating in such programs. This is especially true in the instance of specialists because it is often not possible to conduct programs which will meet their particular needs except at a regional or national level.

A cooperative and coordinated program of continuing education for physicians in a community geographically isolated from a university medical teaching center can have a number of kinds of relationships with general and special, national and regional professional societies of physicians. The program can communicate with the physicians whom it serves regarding the availability of educational experiences sponsored by national and regional societies and encourage physicians to participate in them. It can assist in the administration, for example, of the Physicians Recognition Award program by identifying the participation of physicians in educational programs for which credit toward the award is to be accounted. The program may also become a component of a regional system of continuing physician education, in instances in which, in Pennsylvania for example, the state medical society is attempting to de-centralize and regionalize its continuing education activities.

One other relationship may be noted. A local program may assume responsibility for securing the certification from national and regional, and general and specialist professional societies, for educational courses instituted within a local community of physicians, certification that will permit the identification of credits that may be earned through participation in such courses and applied toward membership and award requirements.

With respect to local components of professional societies, a cooperative and coordinated program of continuing physician education may have a number of relationships. The local program can have the effect of uniting the physician

community as against the centrifugal tendencies of the professional societies of medical and osteopathic physicians, and general practitioners and specialists. The cooperative program can assist the local professional societies in planning and advertising their educational activities and provide assurances that such activities are coordinated in content and schedule with other educational activities being undertaken within the local community. Thus, without diluting the responsibilities of the professional societies for contributing to the development of the competence of their members, a number of mutually supportive relationships can be brought into existence between the professional societies and the cooperative program.

Community Hospitals

Community hospitals are increasingly expected to fulfill a central role in the continuing education of physicians, providing resources that include administration, personnel, facilities, allied services, and financing. The community hospital is a logical place for continuing physician education. He performs a significant part of his professional activities there. There are many reasons warranting the conclusion that professional personnel learn most efficiently at their place of work and in a problem solving environment. It is here that physicians are aggregated in groups that make educational activities more efficient as to the numbers of physicians who can participate conveniently. The community hospital provides a base of operation for the Director of Medical Education, a primary agent in continuing physician education as well as the administrator of health science education programs within the community hospital. The community hospital can also provide the administrative assistance, facilities and equipment and many of the auxiliary services that are required in continuing physicians education programs. The community hospital can provide the information and procedures through which the performance of physicians in rendering patient care can be analyzed for the educational purposes of objectively determining

needs, designing programs, and evaluating the accomplishments of continuing physicians education activities. Finally, the community hospital can provide financial support for such education programs.

There are several relationships which a cooperative and coordinated program can establish with community hospital based physicians' continuing education programs. The cooperative program can assist in planning and administering community hospital programs, augmenting the resources that may be available at a particular hospital. Thus, where no Director of Medical Education or only a part time Director is present, the cooperative program may provide some of the services that are ordinarily provided by that officer. Where two or more community hospitals exist in the same community, moreover, the cooperative program may assist in the coordination of their distinct educational programs avoiding overlapping and duplication, coordinating program content and scheduling, sharing and augmenting facilities and equipment, increasing the sophistication of program planning and administration, and reducing costs.

To accomplish these objectives the cooperative program would have to attain the acceptance and support of the administration of the community hospitals and secure commitments of cooperation and agreement to work toward coordination. Thus, while the educational programs of each community hospital would retain their identity, the quality of such programs should be enhanced to the extent that they are coordinated to a larger program of comprehensive educational activities designed for all of the physicians within the community that is being served.

Finally, the community hospital may provide some of the financial support necessary for the operation of the cooperative planning and administrative mechanism established within the local physician community. The administration of the community hospital is clearly entitled, moreover, to participation in the policy valuing function of the cooperative program.

Directors of Medical Education

Much of what has been said of the community hospital based physician education programs and their relationships with a cooperative and coordinated program also applies to the Director of Medical Education who is the primary administrative officer for all educational programs in a community hospital. Thus, the cooperative program can assist him in planning and administering physician education programs in terms of program design, resources, operations, and evaluation. The cooperative program can even enhance the Director's of Medical Education own capabilities as the seminar discussed in the following chapter of this report demonstrates.

The cooperative program must acknowledge and give expression to the central role of the Director of Medical Education in continuing education in a very clear and strong manner. The Director of Medical Education should be accorded a primary role in designing and carrying out the entire range of activities of the cooperative program. That program should support and reinforce the Director's position as an educational planner and administrator. It will be necessary to insure that his autonomy, professional rights, and general effectiveness are in no wise impaired; and the educational activities of the cooperative program should give evidence of the leadership role of the Director's participation in the cooperative program.

Chairmenships of curriculum and other committees established in the cooperative program are necessarily, for example, the responsibility and right of the Director of Medical Education.

Regional Medical Programs

With respect to the relationships of the cooperative programs of continuing physicians education which are under consideration and their relationships with Regional Medical Programs, it should be understood that the cooperative program is designed for physician communities that are geographically isolated from a

organized in association with university medical teaching center, their programs tend to be concentrated in the communities in which such centers exist, and their programs tend to have less impact on the communities for which the cooperative program is intended.

Nevertheless, the cooperative program and the Regional Medical Program can be mutually supportive. The cooperative program can provide liaison with the Regional Medical Program, identifying educational needs, coordinating educational programs, encouraging physician participation in Regional Medical Program activities, preparing specific activities which may be supported by the Regional Medical Program and made available through it to physicians in other communities, and evaluating Regional Medical Program activities. Indeed, the local cooperative program can be associated with and may become a component of the Regional Medical Program structure.

Reciprocally, the Regional Medical Program can acknowledge the local cooperative program, utilize it as an extension for the administration of some RMP activities, provide resources and services to assist in carrying out the objectives of the local cooperative program, provide liaison with other programs and institutions in the region served by the RMP, provide technical assistance in educational program planning and administration, and provide financial assistance for the general administrative and project activity costs of the cooperative program.

Area Health Education Center

The relationship of a cooperative educational program for a community of physicians and the area health education centers that may come into existence in accordance with the recommendation of the Carnegie Commission in its report, Higher Education and the Nation's Health,[1] is of particular interest. Indeed,

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[1]Mc-Graw-Hill Book Co., 1970.

it would appear that the cooperative program under consideration would have feasibility in precisely the same regions that have been proposed as locations of area health education centers.

Two concepts would appear to govern the relationship. The cooperative program recognizes the special educational needs of physicians and acknowledges that very practical considerations warrant the kind of exclusive attention to their needs that is proposed. The area health education centers are intended to have a role in the full spectrum of health science education programs required in the region to be served by the centers. Indeed, the continuing education of physicians is only a part, and a relatively small part, of the educational activities proposed for the centers.

There is evidence, therefore, that the establishment of an area health education center would not preclude the existence of the cooperative program under consideration. Indeed, the parallel existence and cooperative relationships of cooperative programs and centers would operate to mutual advantage. Thus, just as the programs of the center would be enhanced by the existence and cooperation of nursing schools, medical technician training programs, and comprehensive colleges, the cooperative programs could provide the institutional framework for the relationship of physicians continuing education activities to the general educational programs of the center.

Within that relationship, the cooperative program and the center could be mutually supportive in planning and administering education programs including the determination of needs, program planning, acquisition and utilization of resources, program operations, evaluation, and financing. Finally, the relationship between cooperative programs and the centers would be of special significance with respect to educational programming included for both physicians and other health care personnel, and in educational programs dealing specifically with the cooperative relationships of physicians and other health personnel in rendering patient care in a team or functionally related approach.

Other Health Programs

Occasionally, other health associations and programs participate in continuing physician education by sponsoring educational programs relating to the patient management problem with which they are associated, or through financial support for such programs, as in the case of not only health associations but drug manufacturing firms also.

Initially, it should be understood that physicians are often resentful of such educational programs when they are carried on without consultation with local physicians and the existing structures of physician continuing education programming. In this respect, the cooperative programs role as a clearinghouse for continuing physician education programs may obviate their difficulty by providing the opportunity for the coordination of the educational activities of the health associations as they affect physicians with all other activities with which the cooperative program will be concerned. Thus, the cooperative program could assist the health associations in planning and administering educational programs intended for physicians. Finally, both the health associations and the drug manufacturing firms might provide financial support for the general administration and project activity expenditures of the cooperative program.

University Medical Teaching Centers

The cooperative program concept presupposes the inability of postgraduate departments of medicine at university medical teaching centers to provide the technical assistance in planning and administering continuing physician education programs for communities of physicians that are geographically isolated from university medical teaching centers. This in no way implies that mutually beneficial relationships cannot be established.

On the contrary, the cooperative program can assist the university medical teaching center identify physician education needs in planning programs for physicians, the cooperative program can provide the environment for conducting

educational programs on an extension basis, and the cooperative program could provide opportunities for demonstration programs in postgraduate medical education programs of the university medical teaching center. In turn, the cooperative program would be highly dependent upon the university medical teaching center for instructional personnel and for teachnical assistance in program planning and administration. Thus, the cooperative programs could become the institutional structures through which many of the educational programs and services, which can be provided by university medical teaching centers directly to physicians who can reach the centers conveniently and regularly, can also be provided to physicians who are geographically isolated from the centers.

V. COURSE IN EDUCATIONAL PLANNING AND ADMINISTRATION FOR DIRECTORS OF MEDICAL EDUCATION

The fourth objective of the Planning Program was the analysis of the "methods which could be utilized and the results which might be obtained from conducting and evaluating an informal course in educational planning and administration for Directors of Medical Education carried out with the cooperation of an institution of higher education, for Directors of Medical Education, at hospitals in a community which is geographically isolated from a medical teaching center."

Formal training for prospective and in-service Directors of Medical Education is now available in programs conducted at a number of medical teaching centers. The programs at the Department of Postgraduate Medicine of the Albany Medical College, and the Center for Educational Development of the University of Illinois College of Medicine are among the most well known. Few of the physicians serving presently as Directors of Medical Education have had the opportunity to participate in pre-service training programs designed to assist them in fulfilling the responsibilities of educational planning and administration that are central to role which they are expected to perform. Participation in in-service programs is ordinarily limited and may not be sufficient to provide the continuous development of the capabilities required of an educational administrator.

These circumstances are not uncommon for Directors of Medical Education and the examination of alternate approaches to professional development in educational leadership seems appropriate.

The approach that was undertaken in the Planning Program was that of an informal seminar with Directors of Medical Education from three community hospitals in the Erie area and members of the Education

Department faculty of the College as participants. The approach can be undertaken in any community in which two or more Directors of Medical Education could meet conveniently and on a regular basis with Education Department faculty members from an institution of higher education.

The format of the seminar was purposely unpretentious. Acceptance of the possibility of benefits from participation and a commitment to meet together on a regular basis, for approximately two hours on a specified day, every other week for a period of about a year, were the only pre-conditions for the seminar. It was especially important that the Education Department faculty member who met with the Directors of Medical Education regularly, and others who participated in occasional sessions, did not give the appearance of "teaching" or even of "directing learning." It was thought to be advantageous to have the participants regard the seminar as an occasion to share their experiences, analyze the problems with which they were confronted, and consider alternate solutions to these problems.

From this relatively unstructured beginning, the objectives of the seminar emerged during the term of the seminar and were evident to all at the conclusion despite the lack of stated objectives at the outset. A copy of the seminar syllabus that emerged is appended.

The basic format of the seminar was formed around the analysis of existing programs of continuing education being administered by the Directors of Medical Education, and an analysis of their job descriptions.

Each of the participants was requested to conduct an inventory of the continuing education programs in which he was responsible for planning and implementation. A form was developed which required the

identification of general and special characteristics of each such program. A copy of the form is appended. The completed forms were the material used in the first sessions of the seminar, with the participants explaining how each of the educational programs was planned and conducted. Discussions that developed from these presentations provided the opportunity for evaluation of effectiveness of components and characteristics of each program. with a general analysis of the entire range of problems arising out of the planning and administration of such programs ensuing. The Education Department faculty participant, in addition to arranging for the sessions of the seminar, participated in the sessions to the extent necessary to insure that the participants were exploring the critical issues of educational strategy associated with the kinds of programs that were under consideration. The faculty member also made certain that the participants had access to educational literature that was appropriate to a consideration of the matters that were being considered. A list of such publications, derived largely from a bibliographical aid for similar courses developed by the Department of Postgraduate Medicine of the Albany Medical College is appended. In addition, both the faculty member and the Directors of Medical Education occasionally provided the seminar participants with copies of journal articles and other current literature that related to the planning and administration of continuing medical education programs. A list of selected readings is appended.

The latter part of the seminar sessions was organized around the analysis of the actual job descriptions of the Directors of Medical Education participating in the seminar and model job descriptions that had been prepared by professional associations. The comparison of

these several descriptions and the analysis of these statements in the light of the actual experiences of the Directors of Medical Education which had been studied in the earlier part of the seminar provided very significant insights to the participants that proved to be of substantial importance in deepening their understanding of the nature of their responsibilities, the environment in which they were being fulfilled, the support that could be expected, the problems that would be encountered, and the results that could be attained.

The seminar had a number of demonstrated outcomes:

1. The Directors of Medical Education had an opportunity to engage in a systematic evaluation of their responsibilities, activities, and programs.

2. The opportunity was made possible at relatively little cost in time, convenience, or expenditures to the participants.

3. Education Department faculty members from an institution of higher education could assist in the organization of the seminar and provide some guidance, but in no sense is it necessary or desirable for them to "teach" or "direct learning."

4. The seminar resulted in a deepening of the understanding of the tasks of educational planning and administration as they apply to continuing medical education programs for practicing physicians.

5. The seminar approach utilized in this instance is feasible wherever two or more Directors of Medical Education can meet regularly and conveniently together with a faculty member from the Education Department of an institution of higher education.

6. The seminar stimulated the participants' interest in the continuing evaluation and improvement of their performance as educational administrators.

Finally, the seminar had an impact that is directly related to the other objectives of the Planning Program. Whereas the participants were only slightly acquainted with eachother prior to the seminar and tended to function in isolation of one another, the seminar resulted in the

development of more cooperative relationships among the participating Directors of Medical Education, enabling them to provide support and assistance to one another, and to provide a more cooperative environment for their participation in the coordinated planning process for the accomplishment of a coordinated program of continuing medical education for all of the physicians serving the various hospitals in which the Directors of Medical Education functioned, a central objective of the Planning Program.

EDUCATIONAL PLANNING AND ADMINISTRATION
SEMINAR FOR DIRECTORS OF MEDICAL EDUCATION

SYLLABUS

General Descriptions

The seminar is designed as an in-service, non-credit educational experience for Directors of Medical Education serving at two or more community hospitals within a geographical area that permits convenient and regular sessions in which the Directors of Medical Education may join with Education Department faculty members of an institution of higher education for the purpose of developing their capacities to provide educational leadership in planning and administering continuing medical education programs and to otherwise fulfill their professional responsibilities as postgraduate medical education administrators.

The seminar is designed for Directors of Medical Education in a community that is geographically isolated from a university medical teaching center, will meet for a two hour session every other week during the course of a one year period.

Specific Objectives

To assist Directors of Medical Education to develop their capacities to plan and administer effective programs of continuing education for physicians through the following experiences:

1. Analysis of existing programs.
2. Analysis of responsibilities as defined in job description.

To enhance the capacities of the Directors of Medical Education in education program planning and administration by systematically considering the following:

1. Recent developments in educational psychology, theory, methods and technology.

2. Learning theory as applied to the teaching of adults and members of a profession.

3. Design and selection of appropriate instructional strategies.

4. Educational program planning for health personnel in community hospital based programs.

5. Design and implementation of program evaluation and modification techniques.

Methods of Instruction

Informal.

Readings.

Seminar sessions: two hours every two weeks for a period of a year.

Analysis of issues of effective educational planning and administration that emerge during analysis of actual courses previously and currently conducted under the direction of participants.

Analysis of job descriptions of participant Directors of Medical Education and model job descriptions prepared by professional associations.

Analysis of relationships between stated objectives (job descriptions) and actual performance (courses conducted by participants).

Critical Issues

1. Learning Theory as Applied to Teaching.

   A - Survey of research results on how learning takes place.

   B - Types of learning.

   C - Relation between motivation and learning efficiency. (Reinforcement)

   D - Practical examples of application of theory (Behavior modification)

2. Program Planning in the Development of a Hospital Based Medical Educational Program.

   A - Selection of broad purposes.

   B - Defining of specific purposes in terms of participant behavior changes (Operationalizing objectives)

   C - Function of instructional objectives in development of instructional program, evaluation, and re-design.

D - Application workshop - select on-going program and define and operationalize objectives.

3. Design and Implementation of Instructional Program

A - Survey of instructional strategies and consideration of conditions to which each is best adapted. Developing selection criteria on basis of stated objectives.

(1) Teacher (centered)

(a) Lecture
(b) Discussion
(c) Seminar
(d) Questioning

(i) Open end
(ii) Direct

(2) Student (centered)

(a) Programmed materials
(b) Canned presentation

(3) Reduced teacher role

(a) Group techniques

(i) Structured
(ii) Unstructured

(b) Role play

(4) Appropriate use of audio-visual and other teaching aids.

(5) Use of video tape or film segments as supplement to:

(a) Lectures
(b) Structured discussion
(c) Group techniques
(d) Self study sequences

B - Application workshop, design, instructional strategies for same program selected for writing of objectives.

4. Evaluation

A - Purposes of evaluation

(1) Reward for participants (Reinforcement)

(a) Technique for maintaining confidentiality
(b) Development of non-threatening atmosphere

(2) Feedback for redesign of strategy

(a) Interaction analysis as a means of providing feedback

B - Making the evaluation strategy decision

(1) Consideration of objectives
(2) Survey of types of testing techniques in light of desired objectives (Appropriateness of seletion)
(3) Use of unobtrusive measures

Texts

TEACHING: DESCRIPTION AND ANALYSIS
Hough and Duncan, 1970
Addison Wesley
Reading, Mass.

PROGRAMMING INSTRUCTIONAL OBJECTIVES
Robert F. Mager, 1962
Fearon Publishers
Palo Alto, Calif.

THE SPECIFICATION AND MEASUREMENT OF LEARNING
David A. Payne, 1968
Ginn Blaisdell
Waltham, Mass

DEVELOPING ATTITUDES TOWARD LEARNING
Robert F. Mager and Kenneth Beach, 1967
Fearon Publishers
Palo Alto, Calif.

POSTGRADUATE MEDICAL EDUCATION REFERENCE LIST

THE ART OF TEACHING
Gilbert Highet
Random House Inc., 1950

THEORIES OF LEARNING
E. R. Hilgard
2nd edition-Appleton, Centry, Crofts, Inc., 1956

PUBLIC SPEAKING AS LISTENERS LIKE IT
Richard C. Borden
Harper and Row
49 East 33rd Street, New York, New York

THE SOCIOLOGY OF MEDICINE: A STRUCTURAL APPROACH
Eliot Freidson, Ph.D.
Dodd, Mead and Company, New York, New York, 1968

FERMENT IN MEDICINE
Richard McGraw, M.D.
W. B. Saunders Co., Philadelphia, Pa.

THE GRADUATE EDUCATION OF THE PHYSICIAN
(Report of the Citizen's Commission on Graduate Medical Education)
(The Millis Report)
Council on Medical Education, American Medical Association
535 North Dearborn Street
Chicago, Ill. 60610

PLANNING FOR MEDICAL PROGRESS THROUGH EDUCATION
(The Coggeshall Report)
Association of American Colleges
2530 Ridge Avenue, Evanston, Ill. 60201

MEETING THE CHALLENGE OF FAMILY PRACTICE
(Report of the Ad Hoc Committee on Education For Family Practice)
Council on Medical Education, American Medical Assoc.
535 North Dearborn Street
Chicago, Ill. 60610

THE MEDICAL STAFF IN THE MODERN HOSPITAL
C. Wesley Eisele, M.D. (Ed.)
McGraw-Hill Book Company, New York, New York

MEDICAL EDUCATION AND PRACTICE
(Report of the Tenth Teaching Institute)
Association of American Medical Colleges
2530 Ridge Avenue, Evanston, Ill. 60201

PROGRAMMED INSTRUCTION AND THE HOSPITAL
Hospital Research and Educational Trust
840 North Lake Shore Drive, Chicago, Ill. 60611

THE PSYCHOLOGY OF LEARNING
B. R. Bugalski, 1956
Henry Holt and Company
New York, New York

LEARNING
Sarnoff and Melnick, 1964
Prentice-Hall
Englewood Cliff, New Jersey

THE CONDITION OF LEARNING
Robert Gagne
Holt Reinhold and Winston
New York, New York

WORKING WITH GROUPS, GROUP PROCESS AND INDIVIDUAL GROWTH
Walter Lifton, 1961
Wiley and Sons
New York, New York

TEACHER MADE TESTS
John Green, 1963
Harper and Row
New York, New York

ACCENT ON TEACHING
Paul Dressal and Lewis Mayhew, 1954
Harper Brothers
New York, New York

INTERACTION ANALYSIS THEORY RESEARCH AND APPLICATIONS
Amidon and Hough, 1967
Addison Wesley
Reading, Mass.

MICROTEACHING
Allen and Ryan, 1969
Addison Wesley
Reading, Mass.

COLLECTED PAPERS FROM THE HOSPITAL MEDICAL STAFF CONFERENCE, 1969
University of Colorado School of Medicine

SELECTED READINGS DISTRIBUTED TO SEMINAR PARTICIPANTS

THE COMMUNITY HOSPITAL AS A MAJOR FOCUS FOR CONTINUING MEDICAL EDUCATION
John Gordon Freymann, M.D.
J.A.M.A. 10-14-68 Vol. 206 No1 3

CONTINUING EDUCATION: THE INTERRELATED ROLE OF THE COMMUNITY HOSPITAL, THE PROFESSIONAL SOCIETY AND THE MEDICAL SCHOOL
William A. Sodeman, M.D., Sc.D.
Dis-Chest, Vol. 56, No.3, September, 1969

THE DIRECTOR OF MEDICAL EDUCATION IN THE TEACHING HOSPITAL: A REVISED GUIDE TO FUNCTION
J.A.M.A. 6-21-65 Vol. 192 No. 12

PROGRAM ORGANIZATION FOLLOWING CORPORATE MERGER OF COMMUNITY HOSPITALS
Ernest C. Shortcliffe, M.D.
J.A.M.A. 9-30-68 Vol. 206 No. 1

THE KEY TO EXCELLENCE
Steve Enich, Esq.
Presented at the quarterly meeting-Delaware Valley Hospital Council, 10-11-67

PHYSICIANS CONTINUING EDUCATION PROGRAM

ANALYSIS OF EXISTING PROGRAMS

This analysis should be completed for each distinct Program conducted within the past year. The analysis refers to Programs or types of continuing education activities rather than to individual sessions of such Programs.

Title of Program

Category of Program

Sponsor of Program

Responsibility for Planning

Method of Planning

Intended Participants

Physicians Invited

Method of Invitation

Number and Frequency of Sessions

Scheduling of Sessions

Average Number and Types of Physicians Attending

Site of Program

Instructional Techniques

Instructional Facilities and Equipment

Evaluation Methods and Reports

Attach any printed material available relative to this Program.

VI. Demonstration Program

The final objective of the Planning Program was "the development of a format for a Model or Demonstration Program of cooperation between the community of physicians and an institution of higher education in planning and administering an effective program of continuing physician education in a community which is geographically isolated from a medical teaching center, which Demonstration Program would have applicability to similarly isolated communities, and including an estimate of the annual budgetary requirements of the cooperatively planned and administered program of continuing physician education."

In developing the Demonstration Program, the Planning Committee established the following general objectives toward which effective programs of continuing education for a community of physicians should be directed:

General Objectives

1. The improvement of the quality of patient care rendered by the community of physicians for which the continuing education Demonstration program is intended.
2. The improvement of the clinical judgment of physicians, the ability to reach appropriate judgments regarding the care of patients.
3. The maintenance of thorough up-to-date knowledge of the physician's field of medicine.
4. The improvement of the physician's knowledge and ability to study patients thoroughly and to reach sound conclusions regarding diagnosis, treatment and related problems.
5. The fulfillment of the responsibility of the community of physicians to plan and administer an effective program

of continuing physician education through the cooperative participation of representatives of the professional societies of physicians, the community hospitals, health oriented programs and associations, and the cooperating institution of higher education.

These general objectives served to provide guidance in the formulation and implementation of the Demonstration Program. The Demonstration Program itself was developed following the establishment of priorities from among a wide range of specific objectives that were identified during the Planning Program.

Specific Objectives

1. To promote the existence of a supportive environment for the continuing education of physicians.
2. To assist individual physicians in developing profiles of their educational needs in developing a program of continuing medical education experiences through which they may maintain their competencies in rendering patient care.
3. To increase the individual physicians awareness of and participation in programs of continuing education through which they may enhance their competencies in rendering patient care.
4. To plan and administer a comprehensive and coordinated program of continuing medical education activities for physicians in the community.
5. To plan and administer continuing medical education activities that will serve the real needs of physicians.
6. To identify and strengthen resources that can be utilized in meeting the continuing education needs of physicians in the Erie community.

7. To secure teaching resources from outside to supplement local resources in carrying out effective continuing education programs designed to meet the needs of physicians.
8. To secure necessary facilities and equipment for conducting continuing education activities.
9. To give adequate notice to physicians in the community of continuing education activities and to otherwise encourage participation in such activities.
10. To coordinate the program planning of the professional societies, the community hospitals, and other agencies and institutions that sponsor continuing medical education activities.
11. To formulate and administer a suitable program of evaluation of continuing medical education activities conducted.
12. To provide assistance to physicians who are engaged in medical research and publication activities.
13. To strengthen the medical library resources and services that are available to physicians.
14. To assist Directors of Medical Education in fulfilling their responsibilities to the physicians and community hospitals which they serve.
15. To eliminate needless overlapping, duplication, and conflict in the scheduling of continuing medical education activities.
16. To assist physicians in the Erie medical community in curriculum planning and the development of instructional strategies for continuing medical education activities conducted.

The Planning Committee evaluated the needs of the community of physicians for which the Demonstration Program was formulated and identified priority areas of educational programming which would be undertaken in the

first year of the Demonstration Program. The components of the Demonstration Program are described below.

Demonstration Program Components

Planning and Administrative Structure

In accordance with the conclusions of the Planning Program, the Erie Physicians Continuing Education Program would constitute an association of members of the medical profession in the Erie Metropolitan Area including approximately 200 medical, 75 osteopathic physicians. The Program would be governed by a Board of Directors consisting of representatives of the medical and osteopathic societies, the Directors of Medical Education, the community hospitals, and Gannon College. The Board of Directors would exercise its authority and responsibilities principally through an Executive Committee and special committees that would provide guidance and direction in implementing particular phases of the Demonstration Program. Executive services would be provided by an Executive Director, who would be a member of the medical profession, and an Associate Director and other staff personnel who would be members of the faculty of Gannon College.

The primary responsibility of the Program would be the coordination, planning and administration of the continuing medical education activities of the medical and osteopathic societies and of the general hospitals, and the improvement of the effectiveness of these activities through the emergence of a comprehensive program designed cooperatively to meet the needs of the Erie medical profession considered as a single community of practicing physicians rather than as members of separate professional associations or hospital staffs.

Correlated Basic Medical Science Course

One of the specific continuing education needs that emerged during the Planning Program was for a Correlated Basic Medical Sciences Course. It is

proposed, therefore, that the Demonstration Program would include a Correlated Basic Medical Sciences course, consisting of ten sessions in which visiting professors would present recent developments in some particular area of the Basic Medical Sciences, directed to the clinical correlation of the Basic Sciences in a medical practice setting. The organization of the course, including the selection of visiting professors, would be the responsibility of a Correlated Basic Medical Sciences Course Committee and the Program Staff.

Library Services Development

Recognition of the importance of medical libraries and library services to continuing medical education has resulted in the inclusion of a Library Services Development component in the Demonstration Programs. The first phase of the component is the acquisition of library materials. It is proposed that each of the eight hospitals in Erie be assisted in securing materials included in the Core Medical Library which are not presently available at those libraries and that, in addition, a second collection of the Core Medical Library be installed at a strategic location in each of the two largest general hospitals. The hospitals would commit themselves to maintain the collections beyond the initial upgrading to be provided through the Demonstration Program.

The second phase of the Library Services Development component would consist of an educational program for medical library personnel that would be directed toward the integration of library services into the continuing education activities of the medical community.

The Library Services Development component would be directed by a committee including representatives of the medical library committees of the hospitals. The educational program would be provided by consultants from the Postgraduate Medical Institute, Boston, and the Demonstration Pro-

gram staff.

Teaching Strategies Seminar

The large number of Erie physicians who are devoting substantial periods of time to teaching in medical and health personnel education programs and the evidences of their interests in developing their skills as teachers has indicated the need for an educational program in instructional strategies that would be initiated with a day long Seminar for physicians which would be undertaken at a very early stage in the Demonstration Program. Subsequent activities in this area of developing the skills of physicians as teachers are expected to result from an evaluation of the Seminar.

Supplementary Services

The Demonstration Program would provide additional services that would not otherwise be available to the medical profession in carrying out the continuing education activities including the following:

1. Assisting physicians in analyzing their individual continuing education needs and prescribing appropriate strategies for meeting those needs.
2. Extending the impact of continuing education activities by video tape recordings that would be edited and made available for replay at various times and locations.
3. Assisting physicians who are engaged in teaching in evaluating and improving their teaching techniques and in preparing instructional materials.
4. Assisting physicians in designing and carrying out research activities and in publishing the results of such research, especially in the instance of research activities that are related to continuing

medical education.

5. Securing certification for continuing education activities carried out in the Program.

Program Evaluation

The Demonstration Program would be submitted to evaluation by the Program staff in conjunction with an Evaluation Committee established by the Executive Committee. The purpose of the evaluation would be to determine the degree to which the Demonstration Program contributes to improving the effectiveness of continuing medical education activities in the Erie community, and the impact which the Program has on the improvement of patient care. Finally, the evaluation would continue the analysis of the applicability of the Program model to other communities in which it might be implemented.

National Conference

During the Planning Program other communities have been identified that are geographically isolated from a medical teaching center and these communities present opportunities for the implementation of the Demonstration Program Model that has been developed in Erie. Toward the end of the Demonstration Program, a Conference would be held at which representatives of the medical profession and of educational institutions in such communities could secure an understanding of the potential of the Demonstration Program model and initiate consideration of its implementation in their own communities. The Program staff would provide additional support for such efforts through published monographs describing the Program model and strategies to achieve its implementation. The Program staff would also provide information and consultation services to interested representatives of these communities.

DEMONSTRATION PROGRAM BUDGET

Staff		
Program Director	50%	$ 17,500
Associate Director	50%	10,000
Library Assistant	100%	8,500
Educational Planning Specialists (4)	25%	16,000
Library Planning Specialist	25%	4,000
Evaluation Specialist	25%	4,000
Secretary	100%	5,200
Consultants		
Correlated Basic Medical Sciences Course		10,000
Library Services Development		4,000
Continuing Medical Education		2,000
Materials		
Instructional materials		2,000
Office Supplies		1,000
Rental of Equipment		
Instructional Equipment		1,500
Office Equipment		500
Printing		1,000
Travel		
Staff		2,500
Consultants		2,000
Communications		
Postage		500
Telephone		200
Library--Core Collections		
Complete Existing Collections		18,000
Second Collection at 2 General Hospitals		8,000
Collection at Program Office		4,000
Rental of Space		
Contributed by Cannon College and Hospitals		
Teaching Strategies Seminar		2,500
National Conference		5,000
Indirect Costs		
37.8 per cent of salaries		21,400
Total Costs		$142,800